P7P55D-E LX
Realize the True Future!!

- Intel LGA1156 Platform / Intel® P55 Express Chipset
- True USB 3.0 & SATA 6Gb/s Support
- MemOK!
- TurboV
- Express Gate

CPU, Chipset and Graphics features

LGA1156 Intel® Lynnfield/Clarkdale Processor Ready

This motherboard supports the latest Intel® Lynnfield / Clarkdale processors in LGA1156 package, which has memory and PCI Express controller integrated to support 2-channel (4 DIMMs) DDR3 memory and 16 PCI Express 2.0 lanes, enabling higher graphics performance. Intel® Lynnfield / Clarkdale processor is one of the most powerful and energy efficient CPU in the world.

Intel P55

The Intel® P55 Express Chipset is the latest one-chipset design to support latest 1156 socket Intel® Core™ i7/Core™ i5 Processors. Intel® P55 providing improved performance by utilizing serial point-to-point links, allowing increased bandwidth and stability.

PCIe 2.0

Double Speed; Double Bandwidth
This motherboard supports the latest PCIe 2.0 devices for double speed and bandwidth which enhances system performance.

Memory Features

Dual-Channel DDR3 2200(O.C.) / 1600 / 1333 / 1066 support

The motherboard supports DDR3 memory that features data transfer rates of 2200(O.C.) / 1600 /1333 / 1066 MHz to meet the higher bandwidth requirements of the latest 3D graphics, multimedia, and Internet applications. The dual-channel DDR3 architecture enlarges the bandwidth of your system memory to boost system performance.

Future Transfer Technology

True SATA 6Gb/s Support

Supporting next-generation Serial

True USB 3.0 Support

Experience ultra-fast data transfers at 4.8Gbps with

ATA (SATA) storage interface with onboard Marvell® controller, this motherboard delivers up to 6.0Gbps data transfer rates. Additionally, get enhanced scalability, faster data retrieval, double the bandwidth of current bus systems.

USB 3.0--the latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.0 transfers data 10X faster and is also backward compatible with USB 2.0 components.

ASUS Exclusive Overclocking Features

IO Level UP

Turn on IO Level Up to boost the USB 3.0 or SATA 6Gb/s data transfer rate to up to 500MB/s! Users can flexibly switch between full-speed PCIe x16 mode for their graphics cards and IO Level UP for rapid data throughput.

ASUS TurboV

Easy, Real-Time O.C. Tunings
Feel the adrenaline rush of real-time O.C. - now a reality with the ASUS TurboV. This easy O.C. tool allows you to overclock without exiting or rebooting the OS; and its user-friendly interface makes overclock with just a few clicks away. Moreover, the ASUS OC profiles in TurboV provides the best O.C. settings in different scenarios.

Turbo Key

Auto System Level Up
Achieve extreme yet stable overclocking results automatically with Auto Tuning! With built-in stability testing, Auto Tuning lets even beginners improve performance with no additional cost.

ASUS EPU

System Level Energy Saving
The new ASUS EPU - the world´s first power saving engine, has been upgraded to a new six engine version, which provides total system power savings by detecting current PC loadings and intelligently moderating power in real-time. With auto phase switching for components (which includes the CPU, VGA card, memory, chipset, drives and system fan), the EPU automatically provides the most appropriate power usage via intelligent acceleration and overclocking - helping save power and money.

ASUS Exclusive Features

MemOK!

Any Memory is A-OK!
MemOK! quickly ensures memory boot compatibility. This remarkable memory rescue tool requires a mere push of a button to patch memory issues. MemOK! determines failsafe settings and dramatically improves your system boot success. Get your system up and running in no time!

CPU Level UP

Ever wish that you could have a more expansive CPU? Upgrade your CPU at no additional cost with CPU Level Up! Simply pick the processor you wanted to OC to, and the motherboard will do the rest! See the new CPU speed and enjoy that performance instantly. Overclocking is never as easy as this.

ASUS Express Gate

0 to Internet in Seconds!
Express Gate™ is an ASUS exclusive OS that provides you with quick access to the Internet and key applications before entering Windows®.

ASUS Quiet Thermal Solution

Up to 20°C(36°F) Cooler - Stack Cool 3

Fan Xpert

Active Quiet & Cool
Stack Cool 3 is a fanless cooling solution offered exclusively by ASUS. It effectively and noiselessly transfers heat generated by the critical components to the other side of the specially designed PCB (printed circuit board) for effective heat dissipation - making temperatures cooler by up to 20°C.

Active Quiet & Cool
ASUS Fan Xpert intelligently allows users to adjust both the CPU and chassis fan speed according to different ambient temperature , which is caused by different climate conditions in different geographic regions and system loading.Built-in variety of useful profiles offer flexible controls of fan speed to achieve a quiet and cool environment.

ASUS EZ DIY

ASUS Q-Design

DIY quickly, DIY easily!
ASUS Q-Design enhances your DIY experience. All of Q-LED and Q-DIMM design speed up and simplify the DIY process!

Q- Shield

Easy and Comfortable Installations
The specially designed ASUS Q-Shield does without the usual "fingers" - making it convenient and easy to install. With better electric conductivity, it ideally protects your motherboard against static electricity and shields it against Electronic Magnetic Interference (EMI).

EZ-Flash 2

Simply update BIOS from a USB flash disk before entering the OS
EZ Flash 2 is a user-friendly BIOS update utility. Simply launch this tool and update BIOS from a USB flash disk before entering the OS. You can update your BIOS only in a few clicks without preparing an additional floppy diskette or using an OS-based flash utility.

O.C. Profile

Conveniently store or load multiple BIOS settings
Freely share and distribute favorite overclocking settings The motherboard features the ASUS O.C. Profile that allows users to conveniently store or load multiple BIOS settings. The BIOS settings can be stored in the CMOS or a separate file, giving users freedom to share and distribute their favorite overclocking settings.

ASUS Crystal Sound

Noise Filter

Eliminate background noise while recording
This feature detects repetitive and stationary noises like computer fans, air conditioners, and other background noises then eliminates it in the incoming audio stream while recording.

RoHS

GreenASUS

The motherboard and its packaging comply with the European Union´s Restriction on the use of Hazardous Substances (RoHS). This is in line with the ASUS vision of creating environment-friendly and recyclable products and packaging to safeguard consumers´ health while minimizing the impact on the environment.

Specifications

CPU	Intel® Socket 1156 Core™ i7 Processor/Core™ i5 Processor/Core™ i3 Processor Supports Intel® Turbo Boost Technology
Chipset	Intel® P55 Express Chipset
Memory	4 x DIMM, Max. 16 GB, DDR3 2200(O.C.)*/1600/1333/1066 Non-ECC,Un-buffered Memory Dual Channel memory architecture Supports Intel® Extreme Memory Profile (XMP) *Hyper DIMM support is subject to the physical characteristics of individual CPUs. Some hyper DIMMs only support one DIMM per channel. Please refer to Memory QVL for details. **Refer to www.asus.com or this user manual for the Memory QVL(Qualified Vendors Lidts).
Expansion Slots	1 x PCIe 2.0 x16 4 x PCIe 2.0 x1 (2.5GT/s, gray slots) 2 x PCI
Storage	**Intel® P55 Express Chipset built-in** 6 xSATA 3.0 Gb/s ports Intel Matrix Storage Technology Support RAID 0,1,5,10 **JMicron® JMB361 PATA and SATA controller** 1 xUltraDMA 133/100/66 for up to 2 PATA devices 1 xExternal SATA 3Gb/s port

	Marvell® PCIe SATA 6Gb/s controller: - 2 x SATA 6.0 Gb/s ports (Gray)
LAN	Realtek® 8112L Gigabit LAN controller featuring AI NET2 and Teaming
Audio	VIA® VT1708S 8-Channel High Definition Audio CODEC - Supports Jack-Detection, Multi-streaming, Front Panel Jack-Retasking - Optical S/PDIF out ports at back I/O
USB	NEC USB 3.0 controller - 2 x USB 3.0 ports (Blue, at back panel) Intel® P55 Express Chipset - 12 x USB 2.0 ports (6 ports at mid-board, 6 ports at back panel)
ASUS Unique Features	ASUS IO Level UP for Ultra Performance - True USB 3.0 or True SATA 6Gb/s Support ASUS Xtreme Design ASUS Exclusive Overclocking Features - CPU Level UP,TurboV and Turbo Key ASUS Exclusive Features - MemOK! - Express Gate - ASUS EPU ASUS Quiet Thermal Solution - ASUS Fanless Design: Stylish Heat-sink Solution - ASUS Fanless Design: Stack Cool 3 - ASUS Fan Xpert ASUS Crystal Sound - ASUS Noise Filter ASUS EZ DIY - ASUS Q-Shield - ASUS O.C. Profile - ASUS CrashFree BIOS 3 - ASUS EZ Flash 2 - ASUS MyLogo 2 - Multi-language BIOS ASUS Q-Design - ASUS Q-LED (DRAM) - ASUS Q-DIMM
Overclocking Features	**Precision Tweaker 2** - vCore: Adjustable CPU voltage at 0.00625V increment - vIMC: Adjustable IMC voltage at 0.02V increment - vDRAM Bus: 41-step DRAM voltage control - vPCH: 23-step chipset voltage control - vCPU_PLL: 36-step reference voltage control **SFS (Stepless Frequency Selection)** - Internal Base Clock tuning from 80MHz up to 500MHz at 1MHz increment - PCI Express frequency tuning from 100MHz up to 200MHz at 1MHz increment **Overclocking Protection** - ASUS C.P.R.(CPU Parameter Recall)
Back Panel I/O Ports	1 x External SATA 1 x S/PDIF Out (Optical) 1 x LAN(RJ45) port 8 -Channel Audio I/O 1 x PS/2 Keyboard (Purple) 1 x PS/2 mouse port (Green) 1 x RJ45 ports 2 x USB 3.0/2.0 ports (Blue) 6 x USB 2.0/1.1 ports
Internal I/O Connectors	3 x USB connectors support additional 6 USB ports 1 x IDE connector 1 x CPU Fan connector 1 x Power Fan connector 6 x SATA 3.0Gb/s connectors 2 x SATA 6.0Gb/s connectors (gray) 2 x Chassis Fan connector (1x4-pin, 1x3-pin) Front panel audio connector 1 x S/PDIF Out Header 24-pin ATX Power connector 8-pin ATX 12V Power connector

	System Panel 1 x COM ocnnector 1 x MemOK! Button 1 x IO_Levelup button
BIOS	16 Mb Flash ROM , AMI BIOS, PnP, DMI2.0, WfM2.0, SM BIOS 2.5, ACPI 2.0a, Multi-language BIOS, ASUS EZ Flash 2, ASUS CrashFree BIOS 3
Manageability	WfM 2.0,DMI 2.0,WOL by PME,WOR by PME,PXE
Accessories	User's manual 1 x UltraDMA 133/100/66 cable 2 x Serial ATA 3.0Gb/s cables 1 x Serial ATA 6.0Gb/s cables
Support Disc	Drivers Anti-virus software (OEM version) ASUS Update ASUS Utilities
Form Factor	ATX Form Factor 12 inch x 8.6 inch (30.5 cm x 21.8 cm)